WHAT IS CLAIMED:

1. A navigation system for a vehicle that provides routing information while traversing a route, comprising:

a data processor having a database of routing information over which a land vehicle may travel, the data processor being programmable with a starting point and a destination point, the data processor being provided with user preference data, the data processor being provided with realtime parameters that are used in providing previously selected route between the starting point and the destination point that is selected prior to beginning traversing the route;

a global positioning system (GPS) providing a set of current location data corresponding to the current location of the vehicle;

the data processor providing an alternative route to the destination point based upon the set of current location data, user preference data and a set of updated realtime parameters that provides the user with the alternative route while traversing the previously selected route.

2. The navigation system of claim 1 wherein the user preference data comprises criteria such as shortest time, shortest distance, maximizing use of freeways, minimizing use of freeways, maximizing use of toll roads, and minimizing use of toll roads.

3. The navigation system of claim 1 wherein the set of real time parameters comprises traffic data, weather data, train schedule data, draw bridge schedule data, construction zone data, and special event data, that are

used by the data processor depending upon availability in calculating an alternate route, comparing the previously selected route to the alternate route, and providing information to driver to evaluate and select between the previously selected route and the alternate route repeatedly in response to each update of the real time parameters while traveling along the selected route.

4. The navigation system of claim 3 wherein the information provided to the driver to evaluate and select between the previously selected route and the alternate route is selectively provided only when the alternate route would provide a predetermined improvement in efficiency as measured by a selected parameter.

5. A method of navigating to a destination utilizing a data processing system:

inputting a starting location;

inputting a destination location;

inputting a set of real time parameters;

inputting a set of user preferences;

calculating at least one route from the staring point to the destination including factoring in the effect of the real time parameters and user preferences;

selecting one of the routes and traveling along a selected route toward the destination;

updating the set of real time parameters to create an updated set of real time parameters while traveling along the selected route;

calculating an alternate route from an intermediate location to the destination location based upon the updated set of real time parameters;

comparing the selected route to the alternate route; and

providing information to driver to evaluate and choose between the selected route and the alternate route, the choice of the driver thereafter being the selected route for the continuation of traveling to the destination location.

6. The method of navigating to a destination of claim 5 wherein the steps of updating the set of real time parameters, calculating an alternate route, comparing the previously selected route to the alternate route, are repeated in response to each update of the real time parameters while traveling along the selected route and the step of providing information to driver to evaluate and select between the previously selected route and the alternate route is repeated upon receiving a request from the user or when the alternate route would provide a predetermined degree of improvement in efficiency in reference to at least one selected user preference.

7. The method of navigating to a destination of claim 6 wherein the step of providing information to the user is repeated only when the alternate route results in a reduction of the time of travel from the intermediate location to the destination location.

8. The method of navigating to a destination of claim 6 wherein the step of providing information to the user is repeated only when the alternate route results in a reduction of the cost of travel from the intermediate location to the destination location.

9. The method of navigating to a destination of claim 5 wherein the realtime parameters are selected from the group consisting essentially of:

traffic data;

weather data;

train schedule data;

draw bridge schedule data;

construction zone data; and

special event data.

10. The method of navigating to a destination of claim 5 wherein the real time parameters are data that may be provided to the data processor that could impact the time or cost of travel to the destination location.

11. The method of claim 5 wherein the starting location and intermediate location are input from a global positioning system.